Architecture in open world video games

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Introduction to open world video games

In recent years, the Video game has already become an industry that can not be ignored. However, there are many debates about if video game is ninth art. But I agree with Luke Pearson: “ It is important not to focus on the arguments about whether video games are art, but as a more than $100 billion industry, video games clearly have some form of cultural impact on society. ”[1] Also, we need to acknowledge that there is more and more philosophical thinking on human nature, gender problems, politics and so on in modern video games, but as Jack Denham and Matthew Spokes said, 'critical appraisal of the game situates it clearly in broader discussions of video games as problematic, reductive and damaging'.[2] In the article, I will talk about what strategies game developers use for representing the real world, and how amazing the potential development of architecture in future video game world could be.

How open-world video games represent real world

Open-world video game[3] means you could explore the world freely, but not in a linear play mode. In open-world video games, developers use many strategies to transform the real architecture into game architecture. For example in video game Grand Theft Auto 5, players clearly know they are in a virtual version of Los Angeles, but how does the game developers make players feel it? what can architects learn from this phenomenon?

The city’s identified elements

Through observing my three friends playing open world video games and interviewing them, combined with my own experience playing games, I found that we all shared a very similar perspective on the city in open world video games; we tend to focus on what mainly showed in our screen most of time, but not on our whole travel experience, like we usually do in real world. In real world, everything occupies our senses, like touch, vision, smell, taste, hearing and so on. While, in the most important sense, vision, we do the same as we do in the video game, focus on what attracts us most.

In the classic works of city planning, <The Image of the City>, Kevin Lynch summarize five identified elements that influence people most when they observe the city. “They are paths, the streets, sidewalks, trails, and other channels in which people travel; edges, perceived boundaries such as walls, buildings, and shorelines; districts, relatively large sections of the city distinguished by some identity or character; nodes, focal points, intersections or loci; landmarks, readily identifiable objects which serve as external reference points.”[4]

When i apply Kevin Lynch’ s real world theory to research my topic, i found in open world video games, the paths of the above five elements is the most conspicuous one. Because in the game world, people usually stay in a town or city for finishing missions, the first thing to come to player’ s screen is the street or sidewalks. Also, due to perspective reasons, player prefer not to watch the distant scenery. That leads to people paying more attention in close view.

In picture one[5] and two[6], reality and GTA 5 open world video games version of BILTMORE hotel, downtown Los Angeles are presented. Same facade, in-


Picture 1


Picture 2


Picture 4


Picture 3

-cluding color tone, distance between the buildings and light color design on the top level roof, all show they are same structure. Even though the park design in front of the building is different, people can still recognize this building.

In picture three[7], we can see a split image of a famous landmark, the Hollywood billboard, combining virtual and reality, many people don’t know what Los Angeles city looks like, but they know Hollywood is there. In addition, edges, districts and nodes are all reflected in GTA5. Kevin Lynch’s theory is confirmed when we try to Identify the archetype of the city in open world video games.

How architecture will develop in future game world

With the development of virtual reality technology, many portable virtual simulation devices now are created, like VR headset. Also, in architecture world, many 3D model software already supported people observing and entering the model by wearing VR headset. Given this virtual technology development trend, what will happen to architecture in future video game worlds?

a real synchronous virtual game world

In the film Ready Player One[“Ready Player One(film)”, Wikipedia, accessed August 3, 2020, https://en.wikipedia.org/wiki/Ready_Player_One_(film)], based on Cline's novel of the same name. Movie conceived a game world, people could do many impossible things in an open world game. Because they put on a set of Simulating senses gear, people could get feedback feeling of what they do in game world synchronously. So then that game world becomes not just a game but a world. People confuse virtual and real gradually. In the meantime, the architecture in future game world could have no limitation after we have further technology explosion, then, architecture could be very fancy or unpredictable. Buildings could have no budget limit, structure constraints, laws of nature limits, status limits and so on.

No limitation architecture

In contemporary open world video games, developers tend to simulate existing cities or urban style; very few games will create a completely fictitious world, because of computer hardware performance and game production cycle. While in the picture four[Screenshot from movie <Ready Player One>], screenshot from the movie, the protagonist is passing the floating ladder, Ready to open a floating door. It shows clues about what architecture could do when it loses shackles of reality in future game world. Variable form buildings, buildings that can change gravity, control climate, unlimited resources and so on, could continuously bring perfect enjoyment architecture trip experience. More importantly, those no limitation virtual game worlds will become the pioneers of realistic architecture revolution, because with development of technology, every impossibility will become possible, all buildings realized in the virtual game world will eventually be realized in reality. No limitation architecture is not a dream, just as people used to dream flying in the sky before Christ, but now you could not only take a plane but also wear a flying equipment.

Conclusion

Clearly, open world video games developers know exactly how player take in information from city, not only from city planning but also from the creation of urban atmosphere, like pedestrians, cars, weather and so on. Kevin Lynch’ s theory about how people get information from real city has also been proven correct and practical in virtual city. Looking to the future, architecture in virtual open game worlds have infinite possibilities; it can break through the limitations of traditional physics and people’s concepts, becoming a pioneer of future architecture. Moreover, technology advancement will realize these virtual designs into reality.

Bibliography

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